All over the world, basic research on high-tech acupuncture and integrative laser medicine has been very successfully performed over the last decades, using a broad spectrum of innovative biomedical engineering methods. One of the main present and future goals is to combine basic research on high-tech acupuncture with necessary further experimental and clinical pilot studies for the first time. Acupuncture has been used for medical treatment for thousands of years. Using electro-acupuncture, needle or laser needle stimulation and modern biomedical techniques, it was possible for the first time to quantify changes in biological activities caused by acupuncture. This lecture focuses on the latest innovative aspects that underline the further enhancement and development of high-tech acupuncture. Special emphasis is given to new acupuncture innovations, e.g. teleacupuncture, laser acupuncture, and laser therapy in animal experimental and human clinical studies. Recent investigations concerning bioengineering assessment and modernization of acupuncture based on innovative technology are presented.

Biography

Head of the Research Unit for Complementary and Integrative Laser Medicine, of the Research Unit of Biomedical Engineering in Anesthesia and Intensive Care Medicine, and of the TCM Research Center Graz at the Medical University of Graz, Doctor of technical and Doctor of medical sciences, international lectures, about 600 scientific publications (180 SCI/pubmed listed), author and/or editor of eleven books, currently editor-in-chief and/or member of the editorial board of more than 30 international scientific journals (e.g. Editor-in-chief of the Internet Journal of Alternative Medicine (IJAM), Associate Editor for Medical Acupuncture, Associate Editor of the Journal of Acupuncture and Meridian Studies (JAMS), editor, lead guest editor and guest editor of Evidence-based Complementary and Alternative Medicine (eCAM), Associate Editor of BMC Complementary and Alternative Medicine, Editor-in-Chief of Medicines and of Integrative Medicine International). Prof. Litscher is University Professor at the Medical University of Graz, and Visiting Professor at seven renowned institutions and universities in Asia. In addition, he is Initiator and Chairman of the Annual World Congress of High-Tech Acupuncture and Integrative Medicine which will take place for the second time in China in May 2015. He is also President of ISLA transcontinental (International Society for Medical Laser Applications.

gerhard.litscher@medunigraz.at